



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,379	04/09/2004	Fred Alan Bishop	80655.8517	1600
66170 7590 06/11/2009 Snell & Wilmer L.L.P. (AMEX) ONE ARIZONA CENTER 400 E. VAN BUREN STREET PHOENIX, AZ 85004-2202			EXAMINER AGWUMEZIE, CHARLES C	
			ART UNIT 3685	PAPER NUMBER
			NOTIFICATION DATE 06/11/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

HSOBELMAN@SWLAW.COM
DMIER@SWLAW.COM
JESLICK@SWLAW.COM

Office Action Summary	Application No. 10/821,379	Applicant(s) BISHOP ET AL.	
	Examiner CHARLES C. AGWUMEZIE	Art Unit 3685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5,8-12 and 51-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5,8-12 and 51-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgments

1. Applicants' amendment/argument filed on February 19, 2009 is acknowledged. Accordingly claims 5, 8-12, and 51-59 remain pending.

Response to Arguments

2. Applicant's arguments filed February 19, 2009 have been fully considered but they are not persuasive.
3. With respect to **claims 5 and 57**, Applicant argues that these claims include at least "at least one of editing and removing at least a portion of said executable commands such that said executable commands still remain in said trusted portion, but cannot be executed by said network client, wherein if editing, said editing of said executable commands comprises replacing particular characters within said executable commands." That Kuo teaches standardizing whitespace characters before scanning not during or after scanning. Thus Kuo does not accomplish "at least one of editing and removing at least a portion of said executable commands."

In response, Examiner respectfully disagrees and submits that Kuo do disclose or suggest "at least one of editing and removing at least a portion of said executable commands." Virus codes are generally executable files or scripts that attach itself to text files. By editing the text files and removing the whitespaces, the code or script is being edited as well and that's why the virus signature can be found. Alternatively, Ji does insert special code sequence before and after each problematic instruction (col. 3, lines

10-55, which discloses that the instrumentation involves altering suspicious instructions such as by adding code or altering the suspicious instructions by replacing any suspicious instructions with other instructions) and this can only be accomplished by modifying or editing the problematic code. Furthermore the recitation "...such that said executable commands still remain in said trusted portion, but cannot be executed by said network client, wherein if editing, said editing of said executable commands comprises replacing particular characters within said executable commands" constitutes an intended use limitation. Applicant is reminded that, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Applicant is further reminded that the limitation "to find executable commands inserted by an unwanted party, said executable commands being associated with a selected programming language, wherein said trusted portion is a subset of said network server" also constitutes an intended use limitation and therefore fails to positively recite a method step.

4. Applicant further argues that Kuo invention removes and/or modifies whitespace characters only not portions of the executable command themselves. Kuo contains no disclosure or contemplation of modifying the executable command itself.

In response, Examiner respectfully disagrees and submits that virus code or scripts are generally executable code that attach itself to text files or boot sectors of the computer storage mediums such as hard drives. By editing the text files infested with

the virus code or script, the code or script is being edited as well and that's why the virus signature can be found. Even if this explanation is found wanting, then Ji does insert special code sequence before and after each problematic instruction (col. 3, lines 10-45) and this can only be accomplished by modifying or editing the problematic code. Applicant is reminded that, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

5. Applicant further argues that Kuo's standardization operation does not render the executable command such that it, at least "cannot be executed by the network client."

In response, Examiner asserts that while Kuo may be silent as regards to above, Ji made it clear that if the security policy (which has been pre-established) is violated, that particular instruction which violates the security policy is not executed (col. 3, lines 10-55). Furthermore, Applicant is reminded that, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

6. Applicant further argues that although Ji teaches insertion of code near problematic code, Ji does not teach modification of the problematic code itself.

In response, Examiner respectfully disagrees and submits that Ji modifies the problematic code by inserting special code before and after each problematic

instruction. The interpretation of inserting special code before and after each problematic code does not translate to near the problematic code as Applicant appear to argue.

7. With respect to dependent **claims 8-12, and 51-56**, Applicant argues that these claims are patentable for at least the same reasons as differentiating the independent claim 5 as well as in view of their own respective features.

In response Examiner disagrees and submits that dependent claims 8-12 and 51-56 are not patentable either for being dependent from claim 1 nor for their own individual recited features.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 5, 8-12 and 51-57**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo et al (hereinafter "Kuo"), US Patent No. 6,230,288 B1 in view of Ji, US Patent No. 6,272,641 B1.

10. As per **claims 5 and 57**, Kuo discloses a method for protecting a network server from being used as the basis of an attack on a network client, the method comprising:

scanning a trusted portion of said network server to find executable commands inserted by an unwanted party, said executable commands being associated with a selected programming language, wherein said trusted portion is a subset of said network server; and,

at least one of editing and removing at least a portion of said executable commands such that said executable commands still remain in said trusted portion, but cannot be executed by said network client, wherein if editing, said editing of said executable commands comprises replacing particular characters within said executable commands (col. 2, lines 25-40; see col. 5, lines 20-40, which discloses that the SCAN.EXE performs a whitespace transformation on the text file by replacing each of the various whitespace sequences found in the text file with a common whitespace sequence, e.g. a single whitespace character such as a space).

11. What Kuo does not explicitly disclose is:

scanning a trusted portion of said network server to find executable commands inserted by an unwanted party, said executable commands being associated with a selected programming language, wherein said trusted portion is a subset of said network server

12. Ji discloses scanning a trusted portion of said network server to find executable commands inserted by an unwanted party, said executable commands being associated with a selected programming language, wherein said trusted portion is a subset of said network server (see fig. 1, which discloses “scanner”; col. 3 lines 10-45, which discloses that the applets are statically scanned at the server by the scanner

looking for particular instructions which may be problematic in a security context. The identified problematic instructions are then each instrumented, e.g. special code is inserted before and after each problematic instruction, where the special code calls respectively a prefilter and a post filter ...the instrumentation involves replacing the problematic instruction with another instruction...)

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kuo to incorporate scanning a trusted portion of said network server to find executable commands inserted by an unwanted party, said executable commands being associated with a selected programming language, wherein said trusted portion is a subset of said network server, in view of the teachings of Ji since the claimed invention is merely a combination of old and known elements and in the combination each element would have performed the same function as it did separately, and one of ordinary skill in that art would have recognized that the results of the combination were predictable.

13. As per **claim 8**, Kuo failed to explicitly disclose the method, further comprising rejecting a request when said request contains said executable command having a hostile character.

Ji discloses the further comprising rejecting a request when said request contains said executable command having a hostile character (col. 3, lines 20-45, which discloses that if the security policy is violated the particular instruction which violates the security policy is not executed...).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kuo to incorporate the method, further comprising rejecting a request when said request contains said executable command having a hostile character in view of the teachings of Ji since the claimed invention is merely a combination of old and known elements and in the combination each element would have performed the same function as it did separately, and one of ordinary skill in that art would have recognized that the results of the combination were predictable.

14. As per **claim 9**, Kuo further discloses the method, further comprising logging said executable commands to form a security log (col. 2, lines 45-55; col. 8, lines 1-10).

15. As per **claim 10**, Kuo further discloses the method, further comprising reviewing said security log to determine whether said executable commands are hostile (col. 6, lines 55-65).

16. As per **claim 51**, Kuo further discloses the method, wherein the executable commands cause an unwanted action when executed (col. 2, lines 55-65).

17. As per **claim 52**, Kuo further discloses the method, wherein the executable commands are malicious (col. 1, lines 35-50).

18. As per **claim 53**, Kuo further discloses the method, further comprising receiving a request for connection at said network server from network client

Ji discloses the method, further comprising receiving a request for connection at said network server from network client (col. 2, lines 45-60).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kuo to incorporate the method, further comprising receiving a request for connection at said network server from network client in view of the teachings of Ji since the claimed invention is merely a combination of old and known elements and in the combination each element would have performed the same function as it did separately, and one of ordinary skill in that art would have recognized that the results of the combination were predictable.

19. As per **claim 54**, Kuo failed to explicitly disclose the method, further comprising verifying that a response from said network server to said network client is void of said executable commands

Ji disclose the method, further comprising verifying that a response from said network server to said network client is void of said executable commands (col. 3, lines 35-45).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kuo to incorporate the method, further comprising verifying that a response from said network server to said network client is void of said executable commands in view of the teachings of Ji since the claimed invention is

Art Unit: 3685

merely a combination of old and known elements and in the combination each element would have performed the same function as it did separately, and one of ordinary skill in that art would have recognized that the results of the combination were predictable.

20. As per **claim 55**, Kuo failed to explicitly disclose the method, further comprising providing said response from said network server to said network client.

Ji discloses the method, further comprising providing said response from said network server to said network client (col. 3, lines 35-65)

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kuo to incorporate the method, further comprising providing said response from said network server to said network client in view of the teachings of Ji since the claimed invention is merely a combination of old and known elements and in the combination each element would have performed the same function as it did separately, and one of ordinary skill in that art would have recognized that the results of the combination were predictable.

21. As per **claim 56**, Kuo further discloses the method of claim 5, wherein said programming language comprises javascript (col. 1, lines 55-65).

22. As per **claim 58**, Kuo further disclose the method wherein said editing comprises converting a script format character to another character (see claim 12).

23. As per **claim 59**, Kuo further discloses the method wherein said removing comprises removing a script format character (col. 2, lines 25-40; see col. 5, lines 20-40)

24. Claims 11-12, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo et al (hereinafter "Kuo"), US Patent No. 6,230,288 B1 in view of Ji, US Patent No. 6,272,641 B1 and further in view of Guheen et al (hereinafter "Guheen") U.S. Patent No. 6,473,794 B1.

25. As per **claim 11**, both Kuo and Ji failed to explicitly disclose the method, wherein said protection of the network server is accomplished during an electronic purchase transaction.

Guheen further discloses the method, wherein said protection of the network server is accomplished during an electronic purchase transaction (column 251, lines 34-36).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kuo to incorporate the method, wherein said protection of the network server is accomplished during an electronic purchase transaction in view of the teachings of Guheen since the claimed invention is merely a combination of old and known elements and in the combination each element would have performed the same function as it did separately, and one of ordinary skill in that art would have recognized that the results of the combination were predictable.

26. As per **claim 12**, both Kuo and Ji failed to explicitly disclose the method wherein the electronic purchase transaction is conducted using a digital wallet

Guheen further discloses the method, wherein the electronic purchase transaction is conducted using a digital wallet (column 17, java wallet; column 261, lines 30-53).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kuo to incorporate the method, wherein the electronic purchase transaction is conducted using a digital wallet in view of the teachings of Guheen since the claimed invention is merely a combination of old and known elements and in the combination each element would have performed the same function as it did separately, and one of ordinary skill in that art would have recognized that the results of the combination were predictable.

Conclusion

27. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that the applicant, in preparing the responses, fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles C.L. Agwumezie whose number is **(571) 272-6838**. The examiner can normally be reached on Monday – Friday 8:00 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Calvin Hewitt can be reached on **(571) 272 – 6709**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

Art Unit: 3685

information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charlie C Agwumezie/
Primary Examiner, Art Unit 3685
June 5, 2009